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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,180	02/13/2002	Jeffrey Duane Vance	H49.12-0003	7284

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EXAMINER

MIGGINS, MICHAEL C

ART UNIT	PAPER NUMBER
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1772

MAIL DATE	DELIVERY MODE
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07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/075,180	Applicant(s) VANCE ET AL.	
	Examiner Michael C. Miggins	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-36 is/are pending in the application.
- 4a) Of the above claim(s) 15-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-14 and 30-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. In view of the Reply Brief filed on 4/13/05, PROSECUTION IS HEREBY REOPENED.

New Grounds for rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 10 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Michelson (US 6,175,962).

Michelson discloses a material comprising opposed flexible layers (12 and 14 from Figs. 4-6) formed of an elastomeric or polymer film material (column 2, lines 64-67), a seam (20 from Figs. 4-6) connecting a portion of the opposed flexible layers to form an interspatial pocket (18 from Figs. 4-6) between the opposed flexible layers (column 3, lines 1-12), and a penetration resistant fabric or material (16 from Figs. 4-6) floatably disposed in the interspatial pocket relative to at least one of the opposed flexible layers (see column 3, lines 1-12, since 16 is either attached to only one of the inner or outer layers or are disposed in chamber 18) (applies to instant claims 10 and 13), or a resistant infrastructure including a plurality of resistant plates (16 from Figs. 4-6) formed on one of the opposed flexible layers (see column 3, lines 1-12) (applies to instant claim 10).

4. Claims 1, 3-5, 7-14, 30-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Harpell et al. (US 5362527).

Harpell discloses a material comprising opposed flexible layers (28 and 20 from Figs. 5-7, column 6, lines 60-68), a seam connecting a portion of the opposed flexible layers to form an interspatial pocket between the opposed flexible layers (see column 7, lines 10-20), and a resistant infrastructure including an array of spaced penetration resistant plates (24 and 26 from Figs. 5-7) disposed in the interspatial pocket between the opposed flexible layers (column 7, lines 1-28) (applies to claim 1), or a resistant infrastructure including a plurality of resistant plates formed on one of the opposed flexible layers (column 7, lines 1-28) (applies to instant

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claim 10), or a penetration resistant fabric or material floatably disposed in the interspatial pocket relative to at least one of the opposed flexible layers (see column 7, lines 1-28, since 24 or 26 is either attached to only one of the inner or outer layers 28 or 30).

With regard to claims 3-5 and 7-9 Harpell discloses wherein the flexible layers are formed of an elastomeric or polymer material, or polyurethane (column 8, lines 30-68), wherein the plates are formed of a curable resin (column 19, lines 32-58), wherein the plates are separated by voids between adjacent plates (Figs. 5-7), wherein the array of plates are formed on a substrate (14 or 18 from Figs. 3-6, column 7, lines 12-28 and column 16, lines 14) and wherein the substrate layer is interposed in the interspatial pocket between the opposed flexible layers (column 7, lines 12-28).

With regard to claims 11-12, 14 and 30-31, Harpell discloses a plurality of resistant infrastructures interposed in the interspatial pocket between the opposed flexible layers, the plurality of resistant infrastructures include multiple arrays of plates formed on a substrate, wherein the penetration resistant fabric is formed of one of aramid or high density polyethylene (column 19, lines 59-68), the opposed flexible layers are laminated or sealed to form the seam, wherein a portion of the opposed flexible layers are laminated or sealed (column 7, lines 1-28).

With regard to claims 32-33, Harpell discloses wherein the substrate is floatably disposed in the interspatial pocket relative to at least one of the opposed flexible layers, the material including a first portion and a second portion and the first portion includes first opposed flexible layers and a first resistant infrastructure including an array of penetration resistant plates disposed in an interspatial pocket formed between the first opposed flexible layers and the second portion includes second opposed flexible layers and a second resistant infrastructure

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including an array of penetration resistant plates disposed in an interspatial pocket formed between the second opposed flexible layers, and the first and second portions being joined or sealed to form a composite material (column 7, lines 1-54).

With regard to claims 34-36, Harpell discloses wherein the first and second portions are joined to form a glove having a body cavity (column 24, lines 62-68), wherein the array or penetration resistant plates are formed on a mesh substrate to form a wire mesh portion (since the plates are attached to 14 and layer 14 is a network of woven or non-woven fabrics, see column 22, lines 54-68) and wherein the plates are hexagonal shaped (column 18, lines 33-36).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harpell et al. (US 5362527) in view of Groves (US 5087516).

Harpell fails to disclose wherein spaced plates include a layer of glass beads or particles. Harpell discloses body armor (column 25, lines 1-15).

Groves discloses spaced plates including a layer of glass beads or particles (column 5, lines 21-61 and Fig. 1) in body armor (column 2, lines 14-24) for the purpose of providing improved ballistic resistance (column 2, lines 14-31).

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided wherein spaced plates include a layer of glass beads or particles in the material of Harpell in order to provide improved ballistic resistance as taught or suggested by Groves.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson (US 6370694) in view of Manne (US 5564127).

Michelson fails to disclose wherein the penetration resistant fabric is formed of one of aramid or high density polyethylene.

Manne discloses a penetration resistant fabric which is formed of one of aramid or high density polyethylene (column 3, lines 3-28) in a glove for the purpose of providing improved puncture resistance and flexibility (column 1, lines 41-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided a penetration resistant fabric which is formed of one of aramid or high density polyethylene in the material of Michelson in order to provide improved puncture resistance and flexibility as taught or suggested by Manne.

Conclusion

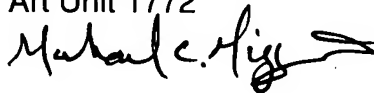
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is 571-272-1494. The examiner can normally be reached on 1:00-10:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael C. Miggins
Primary Examiner
Art Unit 1772



MCM
July 25, 2007



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